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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,706	09/26/2006	Magnus Pelz	P/1228-213 V1305	9161
2352 7590 06/18/2009 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403				
EXAMINER DUFF, DOUGLAS J				
ART UNIT 3748		PAPER NUMBER		
MAIL DATE 06/18/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/598,706

**Applicant(s)**

PELZ ET AL.

**Examiner**

DOUGLAS J. DUFF

**Art Unit**

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

This Office Action is in response to Applicant's amendment filed 2/20/09.

### **DETAILED ACTION**

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aupperle et al. (US 20040050374) in view of Valaszcai et al. (US 2003/0033993). Regarding claims 1-3 and 8, Aupperle teaches an arrangement for recirculation of exhaust gases in a supercharged combustion engine, the arrangement comprising an exhaust line operable to lead exhaust gases out from the combustion engine (5), an inlet line (3) operable to lead air at above atmospheric pressure to the combustion engine and a return line (4) comprising a connection to the exhaust line and a connection to the inlet line positioned and configured so that via the return line is operable to recirculate the exhaust gases from the exhaust line cooling to the inlet line; and a second cooler (4.1) operable to cool the exhaust gases in the return line before they are by use of a liquid medium in the second cooler (4.2), a first cooler using operable to cool the exhaust gases and incorporated in the return line downstream from the second cooler and upstream from a mixture point where the exhaust gases are mixed with the air in the inlet line (4.1), further comprising a cooling system in which the liquid medium is circulated and the cooling system is operable to cool the combustion

engine using the liquid medium (paragraph 0017) , and a third cooler (3.3) operable to cool the air in the inlet line before the air is mixed with the exhaust gases from the return line.

3. Aupperle shows both of the first and second coolers in Fig. 1 using a liquid medium for cooling. Additionally, Aupperle teaches in paragraph 0017 that the first or second coolers may be designed as liquid or air-cooled heat exchangers.

4. Valaszikai et al. specifically teaches a second cooler utilizing a liquid medium and a first cooler downstream from the second cooler which specifically uses ambient air as a cooling medium (paragraph 0061). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a liquid-cooled cooler before an air-cooled cooler in order to cool the recirculated exhaust to a specific temperature range, based upon the engine system requirements, through the space-saving benefits of a liquid cooler with the lower temperature range of the downstream ambient air cooler (paragraph 0016, Fig. 5).

5. Claims 4-7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aupperle in view of Valaszikai et al. and further in view of Schonfeld et al. (US 5607010). The modified Aupperle device discloses the arrangement of claims 1-3, including the coolers situated in close proximity to one another (Fig. 1), but fails to disclose the coolers comprising an integrated unit, wherein the first cooler is positioned in close physical proximity to the third cooler, such that both have a main extent in one plane, and the first cooler and the third cooler are situated relative to one another such that they have an extent in a substantially common plane, and a fourth cooler disposed

in close proximity to the first cooler and the third cooler, the fourth cooler being operable to cool the coolant in a cooling system.

6. Schonfeld teaches coolers comprising an integrated unit (Figs. 2, 6), such that both have a main extent in one plane (Fig. 2), and the first cooler and the third cooler are situated relative to one another such that they have an extent in a substantially common plane, and a fourth cooler disposed in close proximity to the first cooler and the third cooler, the fourth cooler being operable to cool the coolant in a cooling system (radiator). It would have been obvious for a person having ordinary skill in the art at the time the invention was made to utilize an integrated unit as a flat cooler package in order to achieve high heat transfer performance with a minimal frontal area (paragraph 0008).

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS J. DUFF whose telephone number is (571)272-3459. The examiner can normally be reached on M-Th 7 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas E. Denion/  
Supervisory Patent Examiner, Art Unit 3748

/Douglas J Duff/  
Examiner, Art Unit 3748  
6/17/09